

ABSTRACT

A high-performance and low-cost image-forming optical system has a reduced number of constituent optical elements and is made extremely thin, particularly in a direction perpendicular to an image pickup device, by folding an optical path using only three reflecting surfaces. The image-forming optical system has a front unit including a first prism 10, an aperture stop 2, and a rear unit including a second prism 20. The first prism 10 has a first transmitting surface 11, a first reflecting surface 12, and a second transmitting surface 13. The second prism 20 has a first transmitting surface 21, a first reflecting surface 22, a second reflecting surface 23, and a second transmitting surface 24. An optical path incident on the first reflecting surface 22 and an optical path exiting from the second reflecting surface 23 intersect each other. The first reflecting surface 12 of the first prism 10 and the first and second reflecting surfaces 22 and 23 of the second prism 20 have a curved surface configuration that gives a power to a light beam. The curved surface configuration is a rotationally asymmetric surface configuration that corrects aberrations due to decentration.